

Particular improvement has been made in the rice growing regions of Texas and Louisiana, largely through the efforts of the Department in the introduction of new forms. As a result, rice production in this country now about equals the demand.

GROWING OF SUMATRA AND CUBAN TOBACCOS

The commercial success of the shade-grown Sumatra tobacco in the Connecticut Valley has now been fully assured, and the plan adopted by which last year's crop, after being carefully cured and sorted under the direction of the Department's experts, was catalogued and offered for sale at public auction under the supervision of the committee of tobacco brokers with Hon. E. Stevens Henry, M. C., as chairman, proved highly satisfactory. Much credit is due the members of the committee for the time and expense they personally contributed in the interest of this investigation. The ordinary tobacco grown in the open fields in Connecticut brings from eighteen to twenty cents a pound. The average price paid for the shade grown tobacco was \$1.20 a pound. The cost of this tobacco, baled and ready for market, averaged 51½ cents a pound. The net profit per acre on the best crop raised on a lot of about six acres exceeded one thousand dollars per acre. The reports from cigar manufacturers show that the leaf of this Connecticut grown Sumatra tobacco has successfully stood the test of manufacture. At the present time the Department is advising and instructing 38 growers in Connecticut and Massachusetts cultivating 645 acres of shade tobacco. It may be said of this line of Department work that it has demonstrated our ability to produce a leaf for which about six millions of dollars have annually been paid to foreign countries. Experiments are being made in the growing of this tobacco in Pennsylvania, New York, and Wisconsin, but the Secretary inclines to the opinion that the conditions essential for the raising of a high grade of Sumatra tobacco are limited in extent and can be closely defined by the Soil Survey.

The tobacco situation in Texas and Ohio has been thoroughly studied with a view to the production of a desirable type of filler tobacco equal to the imported Cuban leaf, and it is believed that by careful methods of cultivation, fermentation, and assorting, this can be done. In fact, leaf has actually been grown that can not be distinguished from the imported Cuban when properly fermented.

INCREASED INTEREST IN STUDY OF AGRICULTURE

Statistics of attendance at the land-grant colleges show over 42,000 students enrolled—an increase over the previous year of 7 per cent. The attendance for the four-year course in agriculture increased more than 26 per cent. The Secretary points to the marked success of agricultural high schools in Minnesota and Nebraska as an indication that there is a demand for agricultural courses

with those afforded in various manual arts in the city high schools. He states that all over the country farmers are sending their children to public high schools and paying for their tuition.

PROBLEMS OF ROAD BUILDING.

The most noticeable work undertaken by the Office of Road Inquiries has been in the building of object-lesson and experimental roads. Co-operation in this work has been had with national good roads associations, manufacturers of road building machinery, and the railroad corporations. In most cases the building of these roads has been accompanied by important meetings, where the subject of good roads has been ably handled by prominent public men and the experts of the Department. The road material laboratory is operated in collaboration with the Bureau of Chemistry, and the Chief of that Bureau reports the laboratory as now equipped for the testing of road materials of every description, as well as cement and concrete for drains and buildings. A large number of samples were received from all parts of the country, including our island possessions, showing the value practical road builders attach to these tests. It is only by such tests that we can predict which material will give the best results under a given traffic.

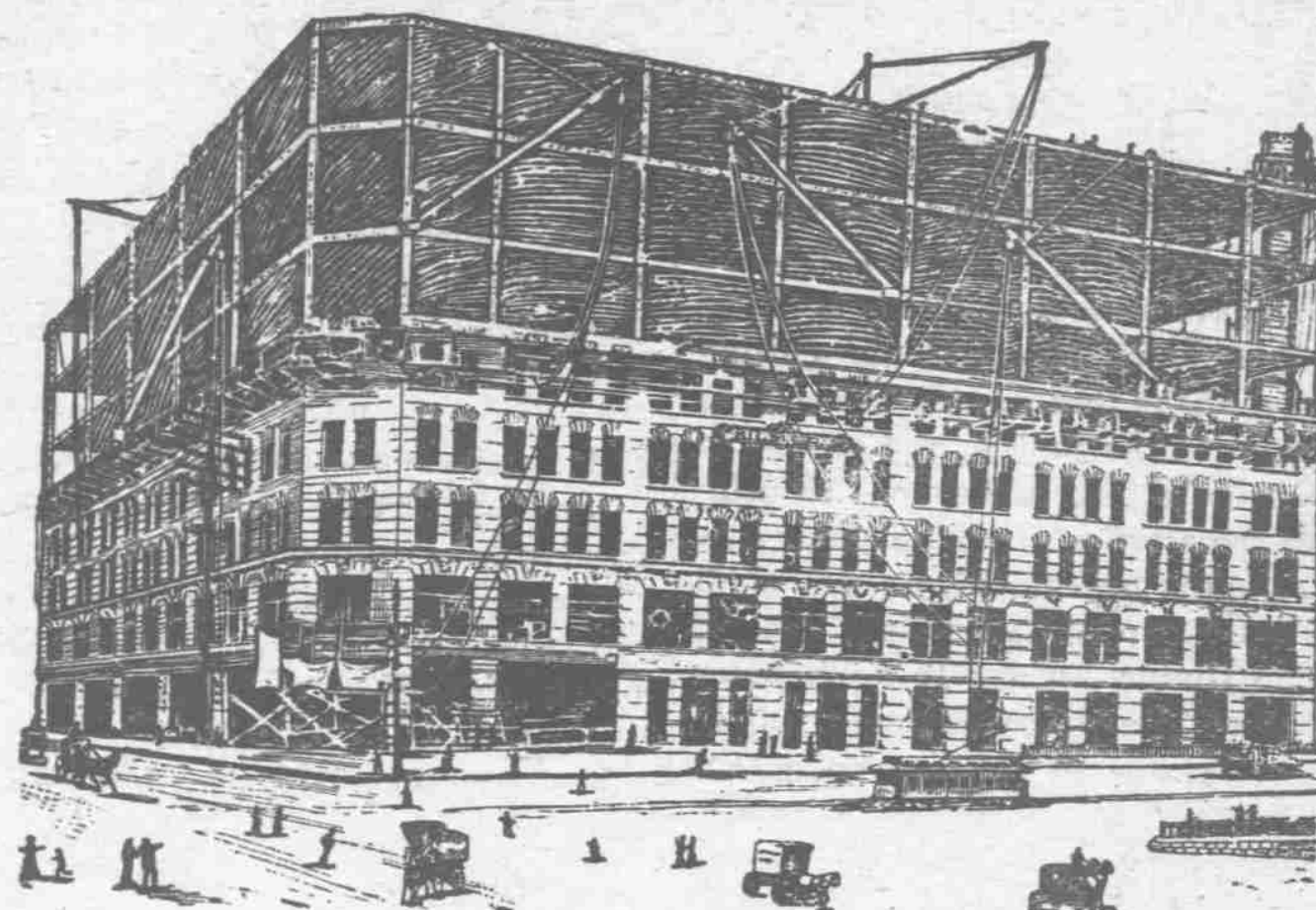
THE BIGNESS OF AMERICAN AGRICULTURE

The Secretary concludes his report with some interesting figures illustrative of the magnitude of the agricultural industry. In 1900 the fixed capital of agriculture was about twenty billions of dollars, or four times that invested in manufactures. In that year there were nearly five million seven hundred and forty farms in the country, covering eight hundred and forty-one million acres, four hundred and fifteen millions of which consisted of improved land. According to the returns of the last census, about forty million people, or more than half of the total population in 1900, resided on farms. Of the twenty-nine million persons reported as engaged in gainful occupations, ten million—more than a third—were employed in agricultural pursuits. The produce of American agriculture in 1899, including farm animals and other products, aggregated nearly five billions of dollars. The most valuable crop was Indian corn, \$828,000,000; then hay and forage, \$484,000,000; cotton gave \$324,000,000; wheat returned \$370,000,000, and oats \$217,000,000. The animals sold and slaughtered during the year were valued at over \$90,000,000, the products of the dairy gave \$472,000,000, while poultry and eggs returned over \$281,000,000. The concluding statement of the Secretary is that results in the work of the Government for agriculture are justifying expenditures, and "the future will still further show the value of science applied to the farm." M.

Washington, D. C., Dec. 7, 1902.

To Make Cows Pay, use Sharpless Cream Separators. Book "Business Dairying" and Cat. 25 free. W. Chester, Pa.

THE LARGEST AND MOST COMPLETE LABORATORY IN THE WORLD.



THE NEW FIRE-PROOF SWAMP-ROOT LABORATORY, NOW NEARING COMPLETION.

[From the New York Sunday World.]

Binghamton, N. Y., Dec. 5.—Whoever goes to Binghamton, as I did, will find a much alive, brisk city, with beautiful, wide, asphalted streets and charming residential sections. Its business streets are decked with handsome business buildings and public institutions, but none of them can compare in magnitude and beauty with the new Swamp-Root Laboratory now nearing completion. This tall, towering building is the first object that confronts the eye upon alighting from the train at the railway stations.

The building itself is remarkable, because, when finished it will be the finest, most scientifically built, and best equipped medical laboratory in the world.

It was the pleasure of the World to send a representative to inspect this building, and from the standpoint of an architect, scientist and searcher after the beautiful, I can say, with warmth, that the trip from New York was well worth while.

Hundreds upon hundreds of the readers of the World owe their restored health, and the restored health of their friends, to Swamp-Root, the great kidney liver and bladder remedy, and I am sure they will be interested in my brief description and the photograph of the new Laboratory, where, beginning with the new year, Swamp-Root will be compounded.

The magnitude of the building is not all. It will stand for centuries. It has the finest of modern steel construction, with fire-proof masonry and cement arches, not a piece of wood is used in its structure. It is situated on the most central and commanding site in the city, and has a frontage of 231 feet on Lewis St., 345 feet on Chenango St., and 407 feet on Lackawanna Avenue; its floor space amounts to the astonish-

ing area of four and one-half acres, and is to be devoted exclusively to the Swamp-Root business.

The building is eight stories high, built of steel, granite and light colored brick, and its architecture is of the most pleasing style.

As is the present Laboratory, so will the new one be equipped with the very latest scientific apparatus for the compounding of Swamp-Root, the demand for which has so greatly increased that the mammoth new laboratory became an absolute necessity.

A convenient switch connecting with the main lines of all railroads entering the city runs direct to the doors of the shipping department.

After going through this new structure as well as the present Laboratory, the writer was surprised to see the immense scale on which Swamp-Root is prepared.

But when an hour later, I sat in the offices of Dr. Kilmer & Co., and had the pleasure of seeing many hundreds of the thousands of unsolicited testimonial letters, from all parts of the world—letters written by grateful men and women cured by Swamp-Root, I thought these people did just as you and I would do. They sat down and wrote their thanks for what Swamp-Root had done for them and asked that their testimonials be published in order that all might know of this wonderful medical discovery.

Having seen a little mountain of these letters, each bearing the imprint of sincerity, no one would wonder that this business has increased as it has, and that the largest and finest laboratory in the world is needed and forthcoming.

It may be of interest to our readers to know that they can obtain free by mail, a sample bottle of Swamp-Root, by addressing Dr. Kilmer & Co., Binghamton, N. Y.

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